

What is claimed is:

1. A fertilizer containing a sparingly water-soluble phosphatic fertilizer and a urea/aliphatic aldehyde condensation product.

5 2. The fertilizer as described in claim 1 wherein the sparingly water-soluble phosphatic fertilizer having elution characteristics where after the sparingly water-soluble phosphatic fertilizer is dipped in 2 weight percent aqueous solution of citric acid at 30°C in the weight ratio as shown
10 by the following equation, the time required to allow elution of 80 weight percent of phosphate components contained in the phosphatic fertilizer into the aqueous solution of citric acid ranges from 0.1 to 2000 minutes.

Equation: (Sparingly Water-Soluble Phosphatic
15 Fertilizer) / (2 Weight Percent Aqueous Solution of Citric Acid)
(in Weight Ratio) = 0.0127

20 3. The fertilizer as described in claim 1 wherein the sparingly water-soluble phosphatic fertilizer is one or more selected from phosphorus ore, fused phosphate fertilizer, and calcined phosphate fertilizer.

 4. The fertilizer as described in claim 1 wherein the ratio of the sparingly water-soluble phosphatic fertilizer to the urea/aliphatic aldehyde condensation product ranges from 0.01 to 5 weight percent in conversion to P_2O_5 .

25 5. The fertilizer as described in claim 1 wherein the

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urea/aliphatic aldehyde condensation product is 2-oxo-4-methyl-6-ureidohexahydropyrimidine or formaldehyde-condensed urea.

6. The fertilizer as described in claim 1 wherein the
5 ratio of a water-soluble phosphoric acid contained to the urea/aliphatic aldehyde condensation product is 0.5 weight percent or less in conversion to P_2O_5 .

7. The fertilizer as described in claim 1 wherein the form is particulate.

10 8. The fertilizer as described in claim 7 wherein the particle size ranges from 1 to 50 millimeters.

9. The fertilizer as described in claim 7 further containing therein a water-repellent substance.

15 10. The fertilizer as described in claim 9 wherein the water-repellent substance has a melting point falling in the range of from 60 to 130°C.

11. The fertilizer as described in claim 9 wherein the water-repellent substance is one or more selected from natural wax and synthetic wax.

20 12. The fertilizer as described in claim 11 wherein the natural wax is one or more selected from hardened castor oil and derivatives thereof.

13. The fertilizer as described in claim 9 wherein the
25 ratio of the water-repellent substance to the total amount of the sparingly water-soluble phosphatic fertilizer, the

water-repellent substance, and the urea/aliphatic aldehyde condensation product ranges from 0.1 to 20 weight percent.

14. A process for producing the fertilizer as described in claim 9 comprising a step of particles granulation by use of the water-repellent substance, the sparingly water-soluble phosphatic fertilizer, the urea/aliphatic aldehyde condensation product, and water as raw materials (step of granulation) and a step of drying the particles by use of a gas held at a temperature not lower than a melting point of the water-repellent substance and not higher than 500°C (step of drying).

15. The process as described in claim 14 wherein the temperature of the raw materials in the step of granulation is a temperature from 0 to 40°C lower than the melting point of the water-repellent substance.

16. The process as described in Claim 14 wherein the granulation of the particles in the step of granulation is carried out by use of a stirring-type mixing granulator.

17. The process as described in claim 14 wherein the water-repellent substance is particulate.

18. The process as described in claim 17 wherein the particle size of the particulate water-repellent substance ranges from 0.005 to 1 millimeter.

19. The process as described in claim 14 wherein the ratio of water ranges from 5 to 30 weight percent to the total amount

of the water-repellent substance, the sparingly water-soluble phosphatic fertilizer, and the urea/aliphatic aldehyde condensation product.

20. A process for controlling an inorganizing speed of the urea/aliphatic aldehyde condensation product characterized by adding to the urea/aliphatic aldehyde condensation product a sparingly water-soluble phosphatic fertilizer having elution characteristics where after the sparingly water-soluble phosphatic fertilizer is dipped in 2 weight percent aqueous solution of citric acid at 30°C in the weight ratio as shown in the following equation, the time required to allow elution of 80 weight percent of phosphate components contained in the phosphatic fertilizer into the aqueous solution of citric acid ranges from 0.1 to 2000 minutes.

Equation: (Sparingly Water-Soluble Phosphatic Fertilizer) / (2 Weight Percent Aqueous Solution of Citric Acid) (in Weight Ratio) = 0.0127

21. The process as described in claim 20 wherein the ratio of the sparingly water-soluble phosphatic fertilizer to the urea/aliphatic aldehyde condensation product ranges from 0.01 to 5 weight percent in conversion to P_2O_5 .

22. The process as described in claim 20 wherein the urea/aliphatic aldehyde condensation product is 2-oxo-4-methyl-6-ureidohexahydropyrimidine or formaldehyde-condensed urea.

23. The process as described in claim 20 characterized by adding further a water-repellent substance.

24. The process as described in claim 23 wherein the water-repellent substance has a melting point falling in the
5 range of from 60 to 130°C.

25. The process as described in claim 23 wherein the water-repellent substance is one or more selected from natural wax and synthetic wax.

26. The process as described in claim 25 wherein the
10 natural wax is one or more selected from hardened castor oil and derivatives thereof.

27. The process as described in claim 23 wherein the ratio of the water-repellent substance to the total amount of the sparingly water-soluble phosphatic fertilizer, the water-
15 repellent substance, and the urea/aliphatic aldehyde condensation product ranges from 0.1 to 20 weight percent.

28. A urea/aliphatic aldehyde condensation product having an inorganizing speed controlled by the process for controlling the inorganizing speed as described in any one of
20 claims 23 to 27.

29. A process for growing crops characterized by using the fertilizer as described in any one of claims 1 to 13.

30. A process for growing crops characterized by using the urea/aliphatic aldehyde condensation product as described
25 in claim 28.